



SEQUENCE LISTING

<110> Morgan, Bruce A.

<120> REGULATION OF NEURAL DEVELOPMENT BY
DAEDALOS

<130> 10287-044001

<140> 10/037,667

<141> 2001-10-25

<150> 60/243,110

<151> 2000-10-25

<160> 13

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 537

<212> PRT

<213> Mus musculus

<400> 1

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Glu Phe Leu Gly Ala Pro Val Gly Pro Ser Val Ser Thr Pro Asn Ser
20 25 30
Gln His Ser Ser Pro Ser Arg Ser Leu Ser Ala Asn Ser Ile Lys Val
35 40 45
Glu Met Tyr Ser Asp Glu Glu Ser Ser Arg Leu Leu Gly Pro Asp Glu
50 55 60
Arg Leu Leu Asp Lys Asp Asp Ser Val Ile Val Glu Asp Ser Leu Ser
65 70 75 80
Glu Pro Leu Gly Tyr Cys Asp Gly Ser Gly Pro Glu Pro His Ser Pro
85 90 95
Gly Gly Ile Arg Leu Pro Asn Gly Lys Leu Lys Cys Asp Val Cys Gly
100 105 110
Met Val Cys Ile Gly Pro Asn Val Leu Met Val His Lys Arg Ser His
115 120 125
Thr Gly Glu Arg Pro Phe His Cys Asn Gln Cys Gly Ala Ser Phe Thr
130 135 140
Gln Lys Gly Asn Leu Leu Arg His Ile Lys Leu His Ser Gly Glu Lys
145 150 155 160
Pro Phe Lys Cys Pro Phe Cys Asn Tyr Ala Cys Arg Arg Arg Asp Ala
165 170 175
Leu Thr Gly His Leu Arg Thr His Ser Val Ser Ser Pro Thr Val Gly
180 185 190
Lys Pro Tyr Lys Cys Asn Tyr Cys Gly Arg Ser Tyr Lys Gln Gln Ser
195 200 205
Thr Leu Glu Glu His Lys Glu Arg Cys His Asn Tyr Leu Gln Ser Leu
210 215 220
Ser Thr Asp Ala Gln Ala Leu Thr Gly Gln Pro Gly Asp Glu Ile Arg
225 230 235 240
Asp Leu Glu Met Val Pro Asp Ser Met Leu His Pro Ser Thr Glu Arg

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<210> 2
<211> 532
<212> PRT
<213> Mus musculus
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Thr	Cys	Asp	Asn	Glu	Leu	Ser	Pro	Glu	Gly	Glu	His	Ala	Asn	Met	Ala
			20					25					30		
Ile	Asp	Leu	Thr	Ser	Ser	Thr	Pro	Asn	Gly	Gln	Gln	Ala	Ser	Pro	Ser
		35					40					45			
His	Met	Thr	Ser	Thr	Asn	Ser	Val	Lys	Leu	Glu	Met	Gln	Ser	Asp	Glu
	50					55					60				
Glu	Cys	Asp	Arg	Gln	Pro	Leu	Ser	Arg	Glu	Asp	Glu	Ile	Arg	Gly	His
65				70						75				80	
Asp	Glu	Gly	Ser	Ser	Leu	Glu	Glu	Ala	Leu	Ile	Glu	Ser	Ser	Glu	Val
			85						90					95	
Ala	Asp	Asn	Arg	Lys	Val	Gln	Asp	Leu	Gln	Gly	Glu	Arg	Gly	Ile	Arg

			100					105					110		
Leu	Pro	Asn	Gly	Lys	Leu	Lys	Cys	Asp	Val	Cys	Gly	Met	Val	Cys	Ile
		115					120					125			
Gly	Pro	Asn	Val	Leu	Met	Val	His	Lys	Arg	Ser	His	Thr	Gly	Glu	Arg
	130					135					140				
Pro	Phe	His	Cys	Asn	Gln	Cys	Gly	Arg	Ser	Phe	Thr	Gln	Lys	Gly	Asn
145				150						155					160
Leu	Leu	Arg	His	Ile	Lys	Leu	His	Ser	Gly	Glu	Lys	Pro	Phe	Lys	Cys
				165					170					175	
Pro	Phe	Cys	Ser	Tyr	Ala	Cys	Arg	Arg	Arg	Asp	Ala	Leu	Thr	Gly	His
			180					185					190		
Leu	Arg	Thr	His	Ser	Val	Gly	Lys	Pro	His	Lys	Cys	Asn	Tyr	Cys	Gly
		195					200					205			
Arg	Ser	Tyr	Lys	Gln	Arg	Thr	Ser	Leu	Glu	Glu	His	Lys	Glu	Arg	Cys
	210					215					220				
His	Asn	Tyr	Leu	Gln	Asn	Val	Ser	Met	Glu	Ala	Gly	Gln	Val	Met	
225				230						235					240
Ser	His	His	Val	Pro	Pro	Met	Glu	Asp	Cys	Lys	Glu	Gln	Glu	Pro	Ile
				245					250					255	
Met	Asp	Asn	Asn	Ile	Ser	Leu	Val	Ala	Phe	Glu	Arg	Pro	Ala	Val	Ile
			260					265					270		
Glu	Lys	Leu	Thr	Ala	Asn	Met	Gly	Lys	Arg	Lys	Ser	Ser	Thr	Pro	Gln
		275					280					285			
Lys	Phe	Val	Gly	Glu	Lys	Leu	Met	Arg	Phe	Ser	Tyr	Pro	Asp	Ile	His
	290					295					300				
Phe	His	Met	Asn	Leu	Thr	Tyr	Glu	Lys	Glu	Ala	Glu	Leu	Met	Gln	Ser
305				310						315					320
His	Met	Met	Asp	Gln	Ala	Ile	Asn	Asn	Ala	Ile	Thr	Tyr	Leu	Gly	Ala
				325					330					335	
Glu	Ala	Leu	His	Pro	Leu	Met	Gln	His	Ala	Pro	Ser	Thr	Ile	Ala	Glu
			340					345					350		
Val	Ala	Pro	Val	Ile	Ser	Ser	Ala	Tyr	Ser	Gln	Val	Tyr	His	Pro	Asn
		355					360					365			
Arg	Ile	Glu	Arg	Pro	Ile	Ser	Arg	Glu	Thr	Ser	Asp	Ser	His	Glu	Asn
	370					375					380				
Asn	Met	Asp	Gly	Pro	Ile	Ser	Leu	Ile	Arg	Pro	Lys	Ser	Arg	Pro	Gln
385				390						395					400
Glu	Arg	Glu	Ala	Ser	Pro	Ser	Asn	Ser	Cys	Leu	Asp	Ser	Thr	Asp	Ser
				405					410					415	
Glu	Ser	Ser	His	Asp	Asp	Arg	Gln	Ser	Tyr	Gln	Gly	Asn	Pro	Ala	Leu
			420					425					430		
Asn	Pro	Lys	Arg	Lys	Gln	Ser	Pro	Ala	Tyr	Met	Lys	Glu	Asp	Val	Lys
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Ala	Leu	Asp	Ala	Thr	Lys	Ala	Pro	Lys	Gly	Ser	Leu	Lys	Asp	Ile	Tyr
	450					455									

<211> 507
 <212> PRT
 <213> Mus musculus

<400> 3

Met	Glu	Asp	Ile	Gln	Pro	Thr	Val	Glu	Leu	Lys	Ser	Thr	Glu	Glu	Gln
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			20					25					30		
Lys	Pro	His	Glu	Ile	Glu	Asn	Val	Asp	Ser	Arg	Glu	Ala	Pro	Ala	Asn
		35					40					45			
Glu	Asp	Glu	Asp	Ala	Gly	Glu	Asp	Ser	Met	Lys	Val	Lys	Asp	Glu	Tyr
	50					55					60				
Ser	Asp	Arg	Asp	Glu	Asn	Ile	Met	Lys	Pro	Glu	Pro	Met	Gly	Asp	Ala
65					70					75					80
Glu	Glu	Ser	Glu	Met	Pro	Tyr	Ser	Tyr	Ala	Arg	Glu	Tyr	Ser	Asp	Tyr
				85					90					95	
Glu	Ser	Ile	Lys	Leu	Glu	Arg	His	Val	Pro	Tyr	Asp	Asn	Ser	Arg	Pro
			100					105					110		
Thr	Ser	Gly	Lys	Met	Met	Cys	Asp	Val	Cys	Gly	Leu	Ser	Cys	Ile	Ser
		115					120						125		
Phe	Asn	Val	Leu	Met	Val	His	Lys	Arg	Ser	His	Thr	Gly	Glu	Arg	Pro
	130						135				140				
Phe	Gln	Cys	Asn	Gln	Cys	Gly	Ala	Ser	Phe	Thr	Gln	Lys	Gly	Asn	Leu
145					150					155					160
Leu	Arg	His	Ile	Lys	Leu	His	Thr	Gly	Glu	Lys	Pro	Phe	Lys	Cys	His
				165					170					175	
Leu	Cys	Asn	Tyr	Ala	Cys	Gln	Arg	Arg	Asp	Ala	Leu	Thr	Gly	His	Leu
			180					185					190		
Arg	Thr	His	Ser	Val	Glu	Lys	Pro	Tyr	Lys	Cys	Glu	Phe	Cys	Gly	Arg
		195					200					205			
Ser	Tyr	Lys	Gln	Arg	Ser	Ser	Leu	Glu	Glu	His	Lys	Glu	Arg	Cys	Arg
	210					215					220				
Ala	Phe	Leu	Gln	Asn	Pro	Asp	Leu	Gly	Asp	Ala	Ala	Ser	Val	Glu	Ala
225					230					235					240
Arg	His	Ile	Lys	Ala	Glu	Met	Gly	Ser	Glu	Arg	Ala	Leu	Val	Leu	Asp
				245					250					255	
Arg	Leu	Ala	Ser	Asn	Val	Ala	Lys	Arg	Lys	Ser	Ser	Met	Pro	Gln	Lys
			260					265					270		
Phe	Ile	Gly	Glu	Lys	Arg	His	Cys	Phe	Asp	Ala	Asn	Tyr	Asn	Pro	Gly
		275					280					285			
Tyr	Met	Tyr	Glu	Lys	Glu	Asn	Glu	Met	Met	Gln	Thr	Arg	Met	Met	Asp
	290					295					300				
Gln	Ala	Ile	Asn	Asn	Ala	Ile	Ser	Tyr	Leu	Gly	Ala	Glu	Ala	Phe	Arg
305					310					315					320
Pro	Leu	Val	Gln	Thr	Pro	Pro	Ala	Pro	Thr	Ser	Glu	Met	Val	Pro	Val
				325					330					335	
Ile	Ser	Ser	Val	Tyr	Pro	Ile	Ala	Leu	Thr	Arg	Ala	Asp	Met	Pro	Met
			340					345					350		
Gly	Ala	Pro	Gln	Glu	Met	Glu	Lys	Lys	Arg	Ile	Leu	Leu	Pro	Glu	Lys
		355					360					365			
Ile	Leu	Pro	Ser	Glu	Arg	Gly	Leu	Ser	Pro	Asn	Asn	Ser	Ala	Gln	Asp
	370					375					380				
Ser	Thr	Asp	Thr	Asp	Ser	Asn	His	Glu	Asp	Arg	Gln	His	Leu	Tyr	Gln
385					390					395					400
Gln	Ser	His	Val	Val	Leu	Pro	Gln	Ala	Arg	Asn	Gly	Met	Pro	Leu	Leu
				405					410					415	

Lys Glu Val Pro Arg Ser Phe Glu Leu Leu Lys Pro Pro Pro Ile Cys
 420 425 430
 Leu Arg Asp Ser Ile Lys Val Ile Asn Lys Glu Gly Glu Val Met Asp
 435 440 445
 Val Phe Arg Cys Asp His Cys His Val Leu Phe Leu Asp Tyr Val Met
 450 455 460
 Phe Thr Ile His Met Gly Cys His Gly Phe Arg Asp Pro Phe Glu Cys
 465 470 475 480
 Asn Met Cys Gly Tyr Arg Ser His Asp Arg Tyr Glu Phe Ser Ser His
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 Ile Ala Arg Gly Glu His Arg Ala Met Leu Lys
 500 505

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 <212> PRT
 <213> Mus musculus

<400> 4
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 Ser Pro Pro Val Ser Asp Thr Pro Asp Glu Gly Asp Glu Pro Met Pro
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 Val Pro Glu Asp Leu Ser Thr Thr Ser Gly Ala Gln Gln Asn Ser Lys
 35 40 45
 Ser Asp Arg Gly Met Ala Ser Asn Val Lys Val Glu Thr Gln Ser Asp
 50 55 60
 Glu Glu Asn Gly Arg Ala Cys Glu Met Asn Gly Glu Glu Cys Ala Glu
 65 70 75 80
 Asp Leu Arg Met Leu Asp Ala Ser Gly Glu Lys Met Asn Gly Ser His
 85 90 95
 Arg Asp Gln Gly Ser Ser Ala Leu Ser Gly Val Gly Gly Ile Arg Leu
 100 105 110
 Pro Asn Gly Lys Leu Lys Cys Asp Ile Cys Gly Ile Val Cys Ile Gly
 115 120 125
 Pro Asn Val Leu Met Val His Lys Arg Ser His Thr Gly Glu Arg Pro
 130 135 140
 Phe Gln Cys Asn Gln Cys Gly Ala Ser Phe Thr Gln Lys Gly Asn Leu
 145 150 155 160
 Leu Arg His Ile Lys Leu His Ser Gly Glu Lys Pro Phe Lys Cys His
 165 170 175
 Leu Cys Asn Tyr Ala Cys Arg Arg Arg Asp Ala Leu Thr Gly His Leu
 180 185 190
 Arg Thr His Ser Val Gly Lys Pro His Lys Cys Gly Tyr Cys Gly Arg
 195 200 205
 Ser Tyr Lys Gln Arg Ser Ser Leu Glu Glu His Lys Glu Arg Cys His
 210 215 220
 Asn Tyr Leu Glu Ser Met Gly Leu Pro Gly Val Cys Pro Val Ile Lys
 225 230 235 240
 Glu Glu Thr Asn His Asn Glu Met Ala Glu Asp Leu Cys Lys Ile Gly
 245 250 255
 Ala Glu Arg Ser Leu Val Leu Asp Arg Leu Ala Ser Asn Val Ala Lys
 260 265 270
 Arg Lys Ser Ser Met Pro Gln Lys Phe Leu Gly Asp Lys Cys Leu Ser
 275 280 285
 Asp Met Pro Tyr Asp Ser Ala Asn Tyr Glu Lys Glu Asp Met Met Thr
 290 295 300

Ser His Val Met Asp Gln Ala Ile Asn Asn Ala Ile Asn Tyr Leu Gly
 305 310 315 320
 Ala Glu Ser Leu Arg Pro Leu Val Gln Thr Pro Pro Gly Ser Ser Glu
 325 330 335
 Val Val Pro Val Ile Ser Ser Met Tyr Gln Leu His Lys Pro Pro Ser
 340 345 350
 Asp Gly Pro Pro Arg Ser Asn His Ser Ala Gln Asp Ala Val Asp Asn
 355 360 365
 Leu Leu Leu Leu Ser Lys Ala Lys Ser Val Ser Ser Glu Arg Glu Ala
 370 375 380
 Ser Pro Ser Asn Ser Cys Gln Asp Ser Thr Asp Thr Glu Ser Asn Ala
 385 390 395 400
 Glu Glu Gln Arg Ser Gly Leu Ile Tyr Leu Thr Asn His Ile Asn Pro
 405 410 415
 His Ala Arg Asn Gly Leu Ala Leu Lys Glu Glu Gln Arg Ala Tyr Glu
 420 425 430
 Val Leu Arg Ala Ala Ser Glu Asn Ser Gln Asp Ala Phe Arg Val Val
 435 440 445
 Ser Thr Ser Gly Glu Gln Leu Lys Val Tyr Lys Cys Glu His Cys Arg
 450 455 460
 Val Leu Phe Leu Asp His Val Met Tyr Thr Ile His Met Gly Cys His
 465 470 475 480
 Gly Phe Arg Asp Pro Phe Glu Cys Asn Met Cys Gly Tyr His Ser Gln
 485 490 495
 Asp Arg Tyr Glu Phe Ser Ser His Ile Thr Arg Gly Glu His Arg Tyr
 500 505 510
 His Leu Ser
 515

<210> 5

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<212> PRT

<213> Mus musculus

<400> 5

Met Ser Gly Ser Thr Phe Pro Thr Val Val Gly His Lys Leu Glu Ser
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 Ile Phe Tyr Ser Ser Thr Val Ala Ala Leu Asp Arg Pro Lys Ala Gly
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 Asp Ser Ser Leu Glu Lys Asp Phe Ser Asp Ala Leu Ile Gly Pro Thr
 35 40 45
 Val Ser Thr Pro Asn Ser Arg His Ser Ser Pro Ser Arg Ser Arg Ser
 50 55 60
 Ala Asn Ser Ile Lys Val Glu Met Tyr Gly Asp Asp Glu Ser Gly Arg
 65 70 75 80
 Leu Leu Ser His Glu Asp Arg Leu Ser Glu Lys Glu Asp Glu Ile Met
 85 90 95
 Gly Asp Asp Ser Leu Val Glu Pro Leu Gly Tyr Cys Asp Gly Pro Gly
 100 105 110
 Gln Asp Pro His Ser Pro Gly Ile Leu Leu Pro Asn Gly Lys Leu Lys
 115 120 125
 Cys Asp Ile Cys Gly Met Val Cys Ile Gly Pro Asn Val Leu Met Val
 130 135 140
 His Lys Arg Ser His Thr Gly Glu Arg Pro Phe His Cys Asn Gln Cys
 145 150 155 160
 Gly Ala Pro Phe Thr Gln Lys Gly Asn Leu Leu Arg His Ile Lys Leu
 165 170 175

His Ser Gly Glu Lys Pro Phe Lys Cys Pro Phe Cys Asn Tyr Ala Cys
 180 185 190
 Arg Arg Arg Asp Ala Leu Ser Gly His Leu Arg Thr His Ala Val Gly
 195 200 205
 Lys Pro Tyr Lys Cys Asn Tyr Cys Gly Arg Ser Tyr Lys Gln Gln Asn
 210 215 220
 Thr Leu Glu Glu His Lys Glu Arg Cys His Asn Tyr Leu Gln Ser Leu
 225 230 235 240
 Ser Asn Glu Ala Gln His Leu Pro Ala His Pro Gly Glu Trp Gly Pro
 245 250 255
 Gln Gly Gly Asn Cys Ile Cys Thr Arg Glu Lys Gln Met Arg Leu Ser
 260 265 270
 Leu Ala Asp Leu Pro Tyr Glu Met Asn Ser Ser Phe Glu Lys Asp Val
 275 280 285
 Glu Ile Val Ser His His Pro Leu Asp Thr Ala Tyr Gly Asn Ser Leu
 290 295 300
 Ala Phe Val Gly Gly Pro Met Arg Leu Pro Pro Thr Asn Cys Ile Ser
 305 310 315 320
 Glu Ile Thr Pro Val Ile Ser Ser Val Tyr Thr Gln Leu Gln Pro Met
 325 330 335
 Gln Gly Arg Pro Asp Met Pro Gly Asn Arg Glu Ala Ala Glu Gly His
 340 345 350
 Glu Asp Ile Pro Asp Gly Thr Gln Ile His Tyr Arg Gly Arg Ser Glu
 355 360 365
 His Gly Ala Ser Pro Thr Asn Gly Cys Gln Asp Ser Asn Thr Asp Thr
 370 375 380
 Glu Ser Asn His Glu Glu Arg Gly Ser Gln Ala Thr Ser Ser Arg Gln
 385 390 395 400
 Ser Ser Ala Tyr Ala Lys Glu Asp Gln Arg Pro Ser Asp Gly Gly Leu
 405 410 415
 Leu Leu Pro Ser Arg Ser Met Pro Gly Thr Ala Lys Glu Ser Leu Arg
 420 425 430
 Val Leu Gly Glu Asp Gly Val Gln Val Lys Val Phe Lys Cys Glu His
 435 440 445
 Cys Arg Val Leu Phe Leu Asp His Val Met Phe Thr Ile His Met Gly
 450 455 460
 Cys His Gly Glu Arg Asp Pro Phe Glu Cys Asn Ile Cys Gly Tyr His
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 Cys Gln Asp Arg Tyr Glu Phe Ser Ser His Ile Val Arg Gly Glu His
 485 490 495
 Lys Val

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 <211> 24
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<210> 9
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<210> 10
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<220>
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<210> 11
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<221> misc_feature

<222> 7

<223> n = inosine

<400> 11

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24

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<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetically generated primer

<400> 12

catattggta caggactcct atcc

24

<210> 13

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Synthetically generated primer

<400> 13

cttgaccctt atgggaagca ggaa

24

Al
cor